

RFP No. 2017-26
MIDDLE SCHOOL: Mathematics
Digital Resources and Online Textbook Adoption

Recommended Purchase:

Mathematics Techbook by Discovery Education

Discovery Education Math Techbook Grade 6
Discovery Education Math Techbook Grade 7
Discovery Education Math Techbook Grade 8
Discovery Education Math Techbook Algebra I

Math Techbook is an innovative digital resource that engages students with real-world problems worth solving. Using a balanced approach to instruction, Math Techbook facilitates in-depth conceptual understanding, procedural skill and fluency, and application. Incorporating the eight mathematical process expectations, and aligned to Common Core State Standards, math Techbook provides real-time data to support differentiation and supports students at varying levels of mastery.

Cost:

\$252,510 for 5120 digital 6-year licenses of Discovery Education Math Techbooks
A single student license for one year is \$8 for each student in grades 6-8 mathematics. A single student license for one year for an eighth grade Algebra I student, taking a high school course, is \$9.50 per student. All of the resources and licenses for teachers are free with purchase of the student licenses. Professional development is also included free with this county-wide adoption.

Rationale for Purchase:

Our current middle school mathematics textbooks were purchased in 2004. The textbooks are no longer used because they do not align with the WCPS Essential Curriculum and Maryland's College and Career-Ready Standards and do not prepare students for the Math PARCC. The resources with the current text are limited, specifically in the area of technology. A selection committee representing our middle schools and each grade level reviewed digital resources and online textbooks for curriculum, delivery, engagement, meeting student needs and technology compatibility. The teacher selection committee highly recommends the purchase of Discovery Education's *Mathematics Techbook*.

Selection Process:

January 11, 2017	RFP Issued
February 1, 2017	Pre-proposal meeting
February 22, 2017	Deadline for RFP proposal submission
February 23, 2017	Review of proposals
February 28, 2017	Overview of RFP with Curriculum Committee
March 1, 2017	Supervisor and Content Specialist narrowed selection to two best
March 6, 2017	Finalist presented digital resources and online textbooks
March 8, 2017	Finalist presented digital resources and online textbooks
March 8 – 29, 2017	Teachers review and pilot digital resources and online textbooks
March 29, 2017	Teachers select best digital resource and online textbook
April 25, 2017	Presentation to Curriculum Committee
May 2, 2017	Curriculum Committee Chairperson announces recommendation

May 3-June 6, 2017 Recommended digital resources available for public review
May 25, 2017 Procurement Review Committee meeting
June 6, 2017 Request Board approval for purchase (consent agenda item)

Selection Criteria:

Digital resources and online textbooks were evaluated in the following areas:

- Curriculum Alignment - content aligned to Maryland's College and Career-Ready Standards, WCPS math transfer goals
- Curriculum Delivery - instructional strategies, support of teacher pedagogy, balance of conceptual and procedural understanding, number sense, reasoning, critical thinking, problem solving, modeling
- Content Delivery - student relevance, real-world application, levels of rigor, variety of types of problems, virtual mathematical manipulatives, adaptive technology
- Student Interest / Engagement - attractive, age-appropriate, clear, builds motivation and confidence in math, builds self-efficacy, feedback to students
- Alignment to Student Needs - accessibility, intervention resources, enrichment resources, ELL resources, COMAR - Represents genders, ages, races, ethnicities and religions fairly and equally
- Additional Materials - professional development, item data bank, manipulatives, investigation/activity books, variety and quantity of study aids, reports, free automatic product updates/upgrades/revisions
- Technology Compatibility - compatible with network, compatible with devices (Mac, iPad), accessible when internet is not available, accessible from home, single sign on for users, easy to use interactive product, variety of mathematical tools available (virtual manipulatives, calculator, graphing), student tracking methods - progress monitoring

Teacher Comments about Discovery Education Math Techbook:

- Grade 6 Teacher: When I used this in my classroom, my students were engaged and excited to participate in mathematical discussions.
- Grade 6 Teacher: The materials are engaging and align well to student interests.
- Grade 6 Teacher: This is engaging and interactive for students. The graphics and videos are really interesting and draw you into the scenario.
- Grade 7 Teacher: Parent letters explain what students are going to learn in each unit, how it is different than how the parents learned the material, and what parents can do to support students outside of school (parent letter is also editable).
- Grade 7 Teacher: Complete model lessons for teachers to use.
- Grade 7 Teacher: Presents the students with real world examples beyond the classroom.
- Grade 7 Teacher: Cross curricular applications to science and social studies. Excellent rubrics for written responses.
- Grade 7 Teacher: Lots of critical thinking through the material.
- Grade 8 Teacher: Assessment builder helps get right to the heart of standards.
- Grade 8 Teacher: Students thought it was very visually appealing and easy to navigate/use on device. Students liked that they had multiple chances to attempt a problem. Struggling learners can be more easily "hooked" into the content and be more open to attempting the math.
- Grade 8 Teacher: The videos and real-world examples are highly engaging.
- Algebra I Teacher: The quality of questions (conceptual, real world and rigorous) was great!

- Algebra I Teacher: This resource balances conceptual understanding with procedural practice of skills. It supports the model of exploring, explaining and extending in the math classroom-similar to the goals and model we have worked hard to implement in the curriculum in the last two years.
- Algebra I Teacher: Tools give students great practice for PARCC.

Purchase:

Title of Item / Description	Order Quantity	Unit Price	Extended Price
Student Resources - MD Math Techbook Middle Level (6-year license)	4,370	\$48.00	\$209,760.00
Student Resources - MD Math Techbook High School Courses (6-year license)	750	\$57.00	\$42,750.00
Teacher Resources - MD Math Techbook Middle Level (6-year license)	62	Gratis	Gratis
Teacher Resources - MD Math Techbook High School Courses (6-year license)	8	Gratis	Gratis
Professional Development		Gratis	Gratis
GRAND TOTAL			\$252,510.00

Technology resources included free with the purchase:

- Online Teacher Resources
- Assessment and Assignment creator
- Auto graded assignments
- Integrates with Google Classroom with a single sign-on

Professional development included free with the purchase:

- With every 500 licenses, two days of on-site professional development is provided, including one training specialist for every 25 teachers.